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| EXAMINER |
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LUDLOW, JAN M

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1797

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ELECTRONIC

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DocketingDept@young-thompson.com

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1. The declaration under 37 CFR 1.132 filed July 12, 2010 is insufficient to overcome the rejection of claims 1, 3-5 based upon Squicciarini in view of Andrews and Treece, or further in view of Jerman as set forth in the last Office action because: The declaration is not commensurate in scope with the claims. In the instant rejection, the examiner has defined what declarant refers to as a tube or vial as the desorption cell. There is nothing in the claim language that defines over this interpretation. In the cited reference, a sample to be extracted is placed in a cell 36 or 37 which is formed from a space in that it encompasses a volume, the sample being inside this volume, it is encompassed by and in intimate contact with said space. The cell is inserted in a seat 31, the sample is heated [0028] and incubated for a time, the cell is pressurized and sample transferred to the loop for analysis in the GC [0049-0054]. There is nothing in the claim which precludes the seat 31 surrounding the cell 36 or 37 to be used for heating or pressurizing the sample.

2. The declaration is further not clear in that it does not fully address the teachings of Squicciarini:

[0041] With reference to FIG. 3 it will be illustrated an embodiment of a desorption cell which is adapted to be used with solid or liquid samples. Said desorption cell comprises a recess or seat 31 having a substantially cylindrical shape, formed in a properly insulated portion 32 of the equipment front panel and of a closing member or knob, 33 for sealingly closing the cell. A conduit 35, connected to the above mentioned valve 4 of the washing fitting 21 opens into the front portion of the cell and a needle 34 is located at the inner end of the cell.

[0042] The cell or seat 31 can receive test tubes or "vials" having a 20 cc capacity, said vials being either vials of the open type such as 37 or vials 36 for liquid or solid samples, that have been sealed through a ring carrying a pierceable septum. The thickness of the test tube or vial is such as the inner available volume of the cell is of 20 cc after the tube has been inserted into the seat.

[0043] After the introduction into the cell of a test tube closed by a septum

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35, the closing knob 33 is screwed and sealingly tightened onto the test tube till the needle 34 perforates the septum.

[0044] FIG. 4 illustrates a cell adapted for analysing residual solvents in bases of printed and/or laminated packing for foodstuffs and pharmaceutical products, both on the outer and the inner surface of the packing sheet, this latter being the surface that will come in contact with the packed product. The cell comprises a recess divided by a net 43 for supporting the sample to be analysed, and forming two hollows 41 and 42, each one with a 20 cc volume. The recess is placed in an insulated volume 40 and the seal is ensured by circular gaskets (not shown) fitting along the whole surface of hollow 42. Two conduits 46 and 47 for the connection to the washing and vacuum sources respectively, as well as two conduits 45 and 44 for the outlet of the vapour solvent, open in the hollows 41 and 42. Clamps 48 and 49 lock the cell into the correct position.

The declarant argues that the needle pierces the septum and releases the gas to be analyzed into the cell (seat 31?), but the claim merely requires “charging a loop with gas from the cell” and does not limit how the charging occurs. Further, in admitting that the needle releases gas to be analyzed, declarant is in effect admitting that the extraction itself has taken place in the cell (vial 36 or 37) in that a liquid or solid sample is placed in the cell, so the thermal desorption of the gas from the liquid or solid takes place to form the gas, which is then released for analysis. Further, the declaration does not address the situation of vial 37, which is open at both ends and in communication with the seat. Nor does the declaration address the embodiment of Figure 4 in which samples are placed directly in the cell.

With respect to scavenging with air, Squicciarini teaches washing the cell via fitting 24 [0047, line 3], prior to placing the sample in the cell, and Treece teaches that washing PET itself with air will dissolve acetaldehyde.

With respect to incubation heating and hydrogen gas, Squicciarini teaches heating and incubation, and the instant claims do not require hydrogen (“such as

hydrogen” is not limiting in that the broader recitation “transport gas” satisfies the claim and Squicciarini teaches a transport gas).

3. Applicant's arguments filed July 12, 2010 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 6-9 are moot because these claims are withdrawn. The examiner regrets that the rejection was inadvertently left in the office action of November 13, 2009.

Applicant argues that Squicciarini does not teach using a PET sample in intimate contact with a desorption cell, scavenging with air, incubating the sample, heating the sample or transferring by hydrogen. Applicant argues that Andrews does not teach how to measure the amount of acetaldehyde and that the instant invention does not use desorption GC-MS but rather FID. Applicant argues that Treece does not teach determining acetaldehyde in PET and that Jerman teaches that helium and hydrogen are typically used as carrier gases in GC, but does not teach the use of hydrogen for transferring loop content. Applicant then concludes that the references therefore do not teach the instant invention.

To clarify: Squicciarini teaches placing samples in direct contact with desorption cell 36 or 37, heating and incubating (no particular time or temperature is specified in the instant claims), pressurizing to transfer to a loop and analyzing by GC 16. That is, the cell is inserted in a seat 31, the sample is heated [0028] and incubated for a time, the cell is pressurized and sample transferred to the loop for analysis in the GC [0049-0054]. Squicciarini fails to teach the specific sample or scavenging the sample with air.

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Andrews teaches a method of analyzing PET. The sample is heated at 120C for one hour (the instant heating and incubation), and then transferred via a line to a GC-MS (loop and analysis). See page 6 of Andrews. The instant claims do not require FID. In that both references teach heating and incubating a sample and then transferring the gaseous result to a GC, it would have been obvious to use PET as a sample in the method of Squicciarini in order to perform the same steps in a known apparatus. With respect to the "intimate contact," in that applicant has provided very little detail in the claims as to the structure of the desorption cell, the method of heating or pressurizing, etc, the examiner has used the broadest reasonable interpretation of the claims and the art, which is that the vial or tube 36 or 37 is the desorption cell in that desorption takes place inside this vessel, and the seat 31 is an outer container used in heating and pressurizing, which is not precluded in the instant claims. Further, the examiner notes that with respect to Figure 4, Squicciarini teaches an embodiment in which samples are placed directly inside a desorption cell that is not a vial or tube. With respect to scavenging with air, Squicciarini teaches doing this before the sample is inserted, and it is unclear why applicant does it afterwards. However, the examiner has relied upon Treece, which teaches scavenging PET samples with air to solubilize acetaldehyde for later removal. In that the method of Andrews is directed to removing acetaldehyde from PET for analysis, it would have been obvious to scavenge with air as taught by Treece in order to assist in this removal. With respect to Jerman, initially the examiner notes that the instant claims do not require hydrogen ("such as hydrogen" is not limiting in that the broader recitation "transport gas" satisfies the claim and Squicciarini teaches a

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transport gas). However, Squicciarini teaches using carrier gas to transfer sample to the GC [0048] and Jerman teaches that hydrogen and helium are typical carrier gases; thus it would have been obvious to use a known carrier gas for its known purpose in transferring samples to and through GC columns as taught by Jerman.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jan M. Ludlow whose telephone number is (571) 272-1260. The examiner can normally be reached on Monday, Tuesday and Thursday, 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (571) 272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Jan M. Ludlow
Primary Examiner
Art Unit 1797

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